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AAA  TTTT  AAA  RRRR  III      ****      SSS  TTTT
A   A   T   A   A R   R   I      ****      S   S   T
A   A   T   A   A R   R   I      ****      S           T
AAAAA T   AAAAA RRRR   I      ****      SSS   T
A   A   T   A   A R   R   I      **  **  **      S   S   T
A   A   T   A   A R   R   I      **  **  **      S   S   T
A   A   T   A   A R   R   III  **  **  **      SSS   T

DDDD  EEEEE V   V EEEEE L      OOO  PPPP  EEEEE RRRR  SSS
D   D E     V   V E     L      O   O P   P E     R   R S   S
D   D E     V   V E     L      O   O P   P E     R   R S
D   D EEEEE V   V EEEEE L      O   O PPPP  EEEEE RRRR  SSS
D   D E     V   V E     L      O   O P   E       R   R   S
D   D E     V V   E     L      O   O P   E       R   R S   S
DDDD  EEEEE V   EEEEE LLLLL OOO  P      EEEEE R   R   SSS
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Question and Answer Bulletin May 1986
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Here are the latest questions from the Atari developers mailbag
 as answered by John Feagans, Director of Software Technology.
 Leave questions on CompuServe for PIN 70007,1072 or GO PCS57 for
 Atari developer SIG information.

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1. Corrections

In this issue we return to the single column format. In trying to
 make better use of space available by going to double-column
 format, many readers could not follow the columns when reading
 this newsletter on-line. Remember, your suggestions are always
 welcome as are your questions.

2. BIOS

*

Q: Are nulls deleted by TOS when communicating over the RS-232 port?

A: When you write a communications package it is important to use the raw-unprocessed BIOS conin instead of a higher level which may intercept control characters including control-C. There is no reason for nulls to be deleted.

*

Q: How do Europeans access the special characters in the Atari character set?

A: The Atari character set is standard in all models of the ST around the world. There are special versions of TOS for each country which contain resources translated to the local language and keyboard translation tables which decode the scan codes to the character codes. The scan codes are always the same for the same key positions because the IKBD controller is the same in all models. The legends on the keys in those positions may vary by country. Some countries have a dead-key function driver which is in the auto folder at boot time. This driver installs in Trap 13 and monitors Bconin for the pressing of an accent mark. When the next vowel is pressed, the correct character code is generated for the application software.

3. DOS

*

Q: How can I prevent alert boxes from printing when I get a DOS error?

A: See the BIOS function setexc(vecnum,vec). Vecnum is the number of the vector to get or set. Vec is the address to setup in the vector slot else a get is performed if the value is -1L. Vecnum \$101 is the critical error handler. Insert your own routine there and the alert boxes will cease printing. Be sure to restore the old vector when you are finished.

4. VDI

*

Q: What is the 6 x 6 font used for?

A: The smallest font is used for labeling icons in medium and high resolution.

5. AES

*

Q: How can I access the menu from a desk accessory?

A: There is no way that this can be done. Menu messages are given to the desktop program (or currently running application that generated the menu. You could generate your own pseudo menu in your window but you would have to do everything yourself.

*

Q: Do you need more than one resource file in your program so that multiple resolutions are handled correctly?

A: It is only necessary to design one resource. The RCS stores all the object positions and width and height in terms of byte aligned character coordinates. When the file is loaded by the `rsrc_load` function, the x and width parameters are multiplied by the current global character width and the y and the height by the current global character height. Thus all the numbers are adjusted to the current resolution you are working in.

6. LOGO

*

Q: Are SETWRITE and SETREAD working?

A: These functions are currently un-implemented in ST Logo.

*

Q: How can a user define his own fill pattern?

A: The example in the Logo manual has a typo. You must define 16 and not 15 values as shown to make the fill pattern work. The last value reads "1280" and should be "128 0".

7. Development Tools

*

Q: How do I increase the stack size in gemstart?

A: In the file `gemstart.s` you will find a comment about allocating 1k of stack space next to a `add.l #500,d0`. \$100 is allocated for the base page and \$400 (1k bytes) is allocated for the stack. To increase the stack to 2k, make the number \$900. Assemble this module and link the resulting object. There is an interesting point to be made about the C run time library function `malloc` here. `malloc` allocates space off this stack. A new and improved `gemstart` will be available soon to allow you to `malloc` more than 1k. Keep in mind that this `malloc` is not `Malloc`.

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the DOS function. The latter Malloc works fine if you have previously done an Mshrink to return unused memory to the operating system.

*

Q: My program to spawn processes get the message "Not enough free store." What is happening?

A: Sounds like you did not do an Mshrink to give memory back to the DOS when your first program started running. (This was verified later in the thread.)

*

Q: How do you get wild cards to work in Kermit?

A: You must enclose the file name in quotes.

*

Q: How do you make the menu box below the title in the RCS larger?

A: Point the mouse at the lower right hand corner and drag the box to the desired size.

8. New On CompuServe

In data library 7 (for registered Atari Developers only) in the Atari Developers SIG on CompuServe, the following files are new this month:

lo68.prg	the other linker program
ahdi.prg	rev 5 hard disk driver.
hdx.prg	hard disk partitioner.
hdx.rsc	
wincap	
ship.prg	hard disk head parking.
invite.let	UK show announcement.
newfrm.doc	form button documentation.
ctype.o	character typing module.
f2s.doc	ROM making software.
f2s.prg	
glue.doc	
glue.prg	
send.prg	
end	
math.h	C header file support
string.h	
qa3.doc	previous Q/A bulletin.